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November 1, 2011

EX PARTE NOTICE

Marlene H. Dortch, Secretary,
Federal Communications Commission
445 12th St, SW
Washington, DC 20554

Re: In the Matter of:

Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150

Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229

Amendment of Part 90 of the Commission's Rules, WP Docket No. 07-100

Dear Ms. Dortch:

Pursuant to Section 1.1206(b)(2) of the Commission's Rules, this is to notify you that on Tuesday November 1 2011, Roger Quayle and Keith Sinclair of IPWireless met with Jennifer Manner, Bezhad Ghaffari, Gene Fullano, Pat Omodio and Brian Hurley of the Public Safety and Homeland Security Bureau at their request to discuss LTE roaming and PLMN ID issues related to the waiver systems.

In the discussion on PLMN ID's for waiver systems, IPWireless suggested that the ideal for waiver systems would be to predict the future architecture of an interoperable national network and develop PLMN ID and related network ID schema accordingly. However, there are many possible architectures for such a network and other unknowns, so that that despite best intentions and efforts, the probability of predicting correctly in a manner in which no change is required to information held on USIM's or network ID schema, is low. Accordingly, IPWireless suggested a simple and pragmatic approach where, prior to the establishment of a national policy, individual waiver jurisdictions could apply to ATIS for unique PLMN ID's, and then address alignment with future (and currently unknown) national policies and architectures at a later time. For systems which might only have hundreds of users prior to a

national schema being available, we discussed the feasibility of simply replacing USIM's in user equipment. We also discussed the capability for USIM's in UE's in the field to have information upgraded over the air, per the provisions in 3GPP TS31.115 & TS31.116, and the relative ease of changing network IDs such as eNodeB identifiers, from the network's element management system.

To the question of roaming and interoperability in the short term between regional waiver systems with a common interest such as mutual aid, we suggested that direct roaming interface links could be established between systems, given that the number of interoperating systems may be small and regional. We noted that the limited number of waiver systems could be easily accommodated in a USIM roaming list, this number being less than an international roaming list of a commercial user's USIM. Also discussed was the need for commercial 3G and 2G roaming as well as LTE roaming for the more rural waiver systems, where we noted that currently available multimode / multimode UE chipsets do not support band 14.

Assuming a national architecture for the sharing of a single PLMN ID for all systems, we agreed that multiple HSS's could be supported via Diameter Routing Agents and an IPX network between systems. We noted however that any interoperability arrangement would require a moderate amount of work to agree, implement, and test.

We discussed issues with networks sharing a common PLMN ID roaming with commercial carriers. IPWireless noted that waiver systems appear likely to have roaming arrangements with different commercial carriers. In this situation, we suggested it was unreasonable to expect commercial carriers to manage roaming authorization and billing on the basis of a single PLMN ID with waiver system specific IMSI number ranges.

Also discussed was a hybrid scheme where each USIM would support 2 PLMN ID's, one for the local waiver system and one for national roaming. We agreed this was potentially feasible, and that roaming with the different commercial operators could be managed using the individual waiver system's PLMN ID's.

To the Commission's questions about mixed vendor networks such as eNodeB's from one vendor and EPC elements from another, we described our support of standard 3GPP-defined interfaces, but noted the network management issues and the amount of work involved in interoperability testing on many different vendor combinations, which could increase the costs for public safety.

Pursuant to the Commission's Rules, one copy of this notice is being filed electronically with the Commission.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "RP Quayle".

Roger Quayle, CTO